Summary of Research

Montana Fish, Wildlife & Parks

Estimating Recreational Use of the Alberton Gorge Section of Montana's Lower Clark Fork River

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Michael S. Lewis, Lee Bastian, and Katie Kneeshaw

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The Alberton Gorge section of the Lower Clark Fork River (see Figure 1 below) is a paradise for many whitewater enthusiasts. This popular stretch of river, which is located about forty minutes west of Missoula in western Montana, contains five major rapids as well as several smaller ones that offer challenges to even the most experienced river rafters and kayakers.

Throughout the past decade, there has been a noticeable increase in floating use of this 19-mile river stretch. Yet, no reliable data has been available to confirm this apparent upward swing in visitation. Hence, during the 2000 summer use season, Montana State Parks, a division of Montana Fish, Wildlife & Parks (FWP), conducted a study aimed at measuring recreational use of the Alberton Gorge.

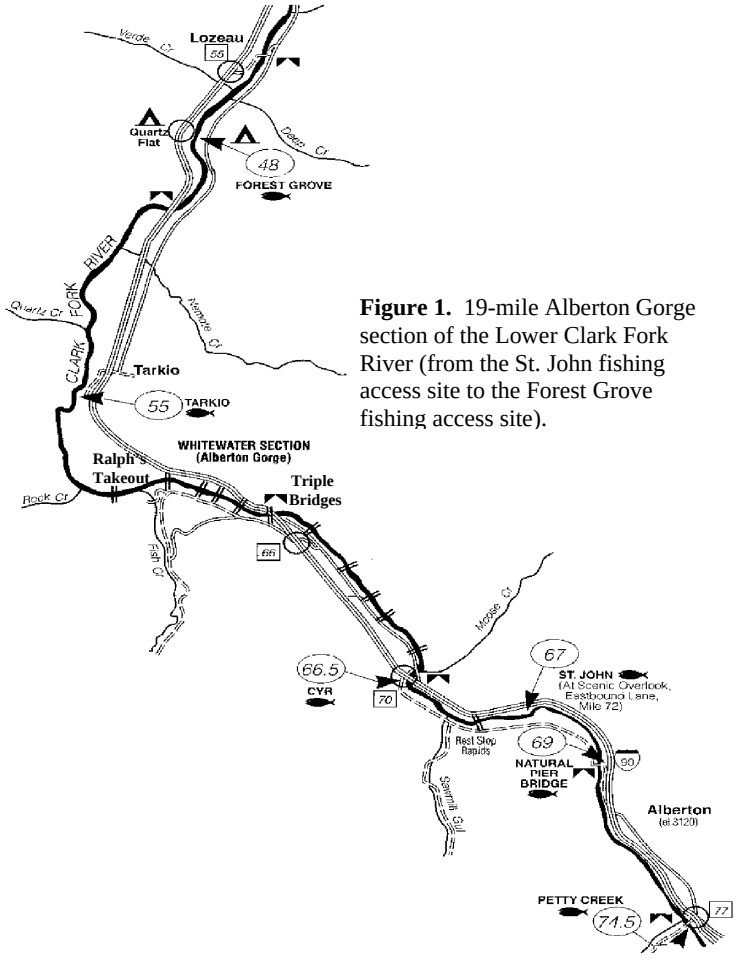

Figure 1. 19-mile Alberton Gorge section of the Lower Clark Fork River (from the St. John fishing access site to the Forest Grove fishing access site).

The purpose of this study was to provide river managers with a baseline set of information concerning the number of people who recreate in the Alberton Gorge area during a typical summer use season (mid-June through August). The study was specifically designed to provide estimates of overall recreational use, floating use, commercial floating use (e.g., floaters who used the services of an outfitter), overall angling use, and float angling use.

This research summary highlights the key findings of the 2000 study. In addition to this research summary, a more detailed report of the study is available from FWP (Kneeshaw, 2000).

Estimates of Recreational Use

The following use estimates were derived from the 2000 study. The numbers below are in visitor days (one visitor day is the equivalent of one person using the river for any part of one day):

Overall recreational use:	**23,890 ± 3,532**
Floating use:	**17,286 ± 2,585**
Commercial floating use:	**5,860 ± 2,849**
Overall angling use:	**2,061 ± 988**
Float angling use:	**1,452 ± 701**

Discussion

The 2000 study was successful in obtaining reliable estimates of recreational use occurring on the Alberton Gorge section of the Lower Clark Fork River. Unfortunately, the 2000 summer use season was not a typical season. A poor winter snow pack combined with little precipitation in the spring resulted in low water levels on the Lower Clark Fork River at the beginning of the season. The summer season itself was characterized by extremely high temperatures, low relative humidity, and a lack of precipitation that led to abnormally low water levels on the river. These conditions also created a situation of extreme fire danger and a resultant outbreak of wildfires throughout the western half of Montana. Consequently, most all of western Montana, including

the Lower Clark Fork River, was closed to recreation beginning August 11, causing an early termination of the survey effort which was scheduled through the end of August.

As such, the results of this study should not be considered a baseline set of data for the Alberton Gorge. That's not to say the information gathered from this study will not be used by river managers. Ideally, river managers would benefit from having estimates of use not only for typical or "average" years, but for times when river water levels are extremely low and/or high—to see how these types of conditions affect numbers of river users.

In the future, FWP fully intends to replicate this study in the hopes of gathering data during a more typical float season which would provide a true baseline set of data for the Gorge. Reliable estimates of recreational use are extremely helpful to river managers in that this type of information can be used to validate and monitor apparent increases (or decreases) in recreational use of a river resource over time. Without this type of information, it can be difficult to anticipate and plan for potential issues that often arise when visitation numbers are shown to be significantly changing over time.

Literature Cited

Kneeshaw, Katie. 2000. *Recreational Use of the Alberton Gorge, Lower Clark Fork River, Summer Use Season 2000.* Technical report developed by the Parks Division of FWP in Region 2. Missoula, MT: Montana Fish, Wildlife & Parks.

About the Authors

Michael S. Lewis, Human Dimensions Specialist, Responsive Management Unit of FWP, Helena, Montana.

Lee Bastian, Regional Parks Manager, Parks Division of FWP, Region 2, Missoula, Montana.

Katie Kneeshaw, (at the time of study) Student Intern, Parks Division of FWP, Region 2, Missoula, Montana.

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Study Methods

The study area comprised the 19-mile Alberton Gorge section of the Lower Clark Fork River. The original study design called for a sampling period from mid-June through the end of August, 2000 (the typical floating season for the Alberton Gorge section of the river). However, due to extreme fire danger, recreational access to most of western Montana (including the Lower Clark Fork River) was prohibited starting August 11. Hence, the final study period was between June 19 and August 10. Throughout the study period, postcard surveys were systematically administered to vehicles parked at river access sites located within the study area following a modified Bus Route Design sampling methodology.

Via the Bus Route Design, river access sites are sampled following the principles of a "bus route". Each river access site is treated like a bus stop. A sampling route and schedule is set in which each access site is visited by the interviewer during a particular sample day. The sampling route is similar to a bus route in that the interviewer goes from site to site (in a predetermined order) arriving at a set time, spending a designated amount of time (e.g., wait time) at the site placing postcard surveys on all vehicles parked at the site, and then departing to the next site at a set time. This design differs from an actual bus route in that the starting locations and starting times of the route vary each day as randomly selected to ensure each site is adequately sampled across hours of the day. The Bus Route Design is an ideal sampling method for river resources where there are many points of access and it is difficult to contact river users who park their vehicles for extended periods of time while recreating on the river.

Six river access sites within the Alberton Gorge area were identified for study. Placed in order (following the river from east to west) they included the St. Johns fishing access site (FAS), Cyr FAS, Triple Bridges area, Ralph's Takeout, Tarkio FAS, and Forest Grove FAS. These access sites accommodate most (if not all) recreational access to the Alberton Gorge section of the Lower Clark Fork River. In order to distribute sampling times adequately across each of the six access sites and across hours of the day (daylight hours only), one of the six access sites was randomly selected as the first sampling location (or stop) on the route for each sample day. Additionally, one of three starting times (8:45 am, 12:15 pm, or 3:45 pm) was randomly selected as the time the interviewer was scheduled to arrive at the first sampling location identified for a particular sample day. Wait times varied from site to site (e.g., wait times were longer for more heavily used sites). This modified Bus Route Design differs from a traditional design in that the interviewer always started at one of the six access sites and at the beginning of the wait time for that site. In a traditional design, a random location on the route would have been selected as the starting point, which might not necessarily have been at an access site or at the beginning of the wait time for a particular site.

The interviewer's schedule called for sampling each weekend day and 2-3 randomly selected weekdays per week throughout the study period, based upon knowledge the river is most heavily used on weekends. At each access site (within the designated wait time for that site), the interviewer placed a post card survey on every car present and recorded on a log sheet the survey number, date, location, time, and whether or not the vehicle was a bus. A total of 1,784 postcard surveys were administered over 33 sampling days throughout the study period. A 37 percent response rate to the survey was achieved.

The probability a particular vehicle (and it's occupants) could have been included in the sample (based upon the amount of time it was parked at the access point the day in which it was sampled) in combination with responses to the postcard survey, and the survey response rate were used to estimate recreational use of the Gorge. A more detailed reporting of study methods, including data analysis methods, are available in a technical report developed by FWP (Kneeshaw, 2000).